L Number	Hits	Search Text	DB	Time stamp
1	12	DUJON NEAR BERNARD	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2004/04/21 12:58
2	12	(I-CSM$2 I-pan$2 I-ceu$2 I-ppo$2 I-cre$2 I-tev$2).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2004/04/21 13:42
3	418	I-CSM$2 I-pan$2 I-ceu$2 I-ppo$2 I-cre$2 I-tev$2	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2004/04/21 13:43
6	0	(I-CSM$2 I-pan$2 I-ceu$2 I-ppo$2 I-cre$2 I-tev$2) SAME mammal$3 SAME chromosome	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2004/04/21 13:44
7	62	((I-SCE$2 I-CSM$2 I-pan$2 I-ceu$2 I-ppo$2 I-cre$2 I-tev$2) NEAR site) and chromosome	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2004/04/21 13:45
8	51	(((I-SCE$2 I-CSM$2 I-pan$2 I-ceu$2 I-ppo$2 I-cre$2 I-tev$2) NEAR site) and chromosome) and mammal$5	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2004/04/21 13:46
9	24	(((I-SCE$2 I-CSM$2 I-pan$2 I-ceu$2 I-ppo$2 I-cre$2 I-tev$2) NEAR site) and chromosome) and (chromosome SAME mammal$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2004/04/21 13:46
-	360	(group ADJ I ADJ Intron)or (intron ADJ encoded)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2002/04/22 13:49
-	11	((group ADJ I ADJ Intron)or (intron ADJ encoded)) and (chromosome$2 NEAR mammal$10)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2002/04/22 13:53
-	17	((group ADJ I ADJ Intron)or (intron ADJ encoded)) and I-sceI$5	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2002/04/22 13:58
-	439	I-SCE$2 I-CSM$2 I-pan$2 I-ceu$2 I-ppo$2 I-cre$2 I-tev$2	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/02/05 19:14
-	90	(I-SCE$2 I-CSM$2 I-pan$2 I-ceu$2 I-ppo$2 I-cre$2 I-tev$2) and (eukaryo$5 animal$2 mammal$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/02/05 19:14
-	380	I-CSM$2 I-pan$2 I-ceu$2 I-ppo$2 I-cre$2 I-tev$2	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/02/05 19:27
-	49	(I-CSM$2 I-pan$2 I-ceu$2 I-ppo$2 I-cre$2 I-tev$2) and (eukaryo$5 animal$2 mammal$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/03/28 14:48

-	48	(I-CSM$2 I-pan$2 I-ceu$2 I-ppo$2 I-cre$2 I-tev$2) and (homo$5 recomb$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/02/05 19:40
-	2	wo NEAR "9614408"	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/02/05 19:38
-	87	(I-SCE$2 I-CSM$2 I-pan$2 I-ceu$2 I-ppo$2 I-cre$2 I-tev$2) and (homo$5 recomb$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/02/05 19:40
-	9	DUJON-BERNARD	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/03/11 13:34
-	44	(I-SCE$2 I-CSM$2 I-pan$2 I-ceu$2 I-ppo$2 I-cre$2 I-tev$2) NEAR site	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/03/11 13:35
-	8	((I-SCE$2 I-CSM$2 I-pan$2 I-ceu$2 I-ppo$2 I-cre$2 I-tev$2) NEAR site) and (mammal$5 NEAR chromosome)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/03/11 13:40
-	0	((I-SCE$2 I-CSM$2 I-pan$2 I-ceu$2 I-ppo$2 I-cre$2 I-tev$2) NEAR site) SAME (mammal$5 NEAR chromosome)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/03/11 13:40
-	6	(I-CSM$2 I-pan$2 I-ceu$2 I-ppo$2 I-cre$2 I-tev$2) SAME (eukaryo$5 animal$2 mammal$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2003/03/28 14:48

=> d his

(FILE 'MEDLINE, AGRICOLA, CANCERLIT, SCISEARCH, CAPLUS, MEDICONF' ENTERED AT 14:38:17 ON 21 APR 2004)

DEL HIS

L1 3187 S I-SCE? OR I-CSM? OR I-PAN? OR I-CEU? OR I-PPO? OR I-CRE? OR I
L2 19880 S MAMMAL? (L) CHROMOSOME
L3 67 S L1 (L) L2
L4 23 DUP REM L3 (44 DUPLICATES REMOVED)
L5 23 SORT L4 PY
E DUJON B?/AU
L6 101 S E4
L7 23 S L6 AND L1
L8 22 DUP REM L7 (1 DUPLICATE REMOVED)
L9 22 SORT L8 PY

=> d an ti so au ab pi 19 21 18 16

L9 ANSWER 21 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:403935 CAPLUS
DN 136:396983
TI Nucleotide sequence encoding yeast restriction endonuclease **I-SceI** and uses in genetic mapping and site-directed gene recombination
SO U.S., 84 pp., Cont.-in-part of U.S. 5,792,632.
CODEN: USXXAM
IN **Dujon, Bernard**; Choulika, Andre; Perrin, Arnaud; Nicolas, Jean-Francois
AB The present invention relates to an isolated yeast DNA encoding the restriction endonuclease **I-SceI**, and use of **I-SceI** for mapping eukaryotic genomes and for in vivo site directed genetic recombination. Specifically, the invention relates to a vector comprising a plasmid, bacteriophage, or cosmid vector containing the DNA sequence of the enzyme **I-SceI**. The invention also relates to E. coli, eukaryotic cells transformed with a vector of the invention, transgenic animal with the DNA sequence encoding **I-SceI**. The invention relates to a transgenic organism in which at least one restriction site for the enzyme **I-SceI** has been inserted in a chromosome of the organism. The invention further relates to methods for gene mapping in yeast chromosome, yeast artificial chromosome, and cosmids, and site-directed insertion of genes.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6395959	B1	20020528	US 1996-643732	19960506
US 5474896	A	19951212	US 1992-971160	19921105
US 5792632	A	19980811	US 1994-336241	19941107
US 2003182670	A1	20030925	US 2002-152994	20020523

L9 ANSWER 18 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:545391 CAPLUS
DN 129:172448
TI Cloning and expression of gene for restriction endonuclease **I-SceI** of Saccharomyces cerevisiae and use of **I-SceI**
SO U.S., 79 pp., Cont.-in-part of U. S. 5,474,896.
CODEN: USXXAM
IN **Dujon, Bernard**; Choulika, Andre; Perrin, Arnaud; Nicolas, Jean-francois
AB A mitochondrial gene encoding restriction endonuclease **I-SceI** of Saccharomyces cerevisiae and a synthetic universal code encoding **I-SceI** for the expression in Escherichia coli and yeast are provided. Applications of **I-SceI** for genetically mapping yeast chromosomes by the nested chromosomal fragmentation strategy, inducing double stranded DNA break, and in vivo site-directed insertion of genes and homologous recombination in eukaryotes are also described. It may also be used for preparing transgenic animal models of human diseases and genetic disorders.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	US 5792632	A	19980811	US 1994-336241	19941107
	US 5474896	A	19951212	US 1992-971160	19921105
	US 5866361	A	19990202	US 1995-465273	19950605
	CA 2203569	AA	19960517	CA 1995-2203569	19951106
	WO 9614408	A2	19960517	WO 1995-EP4351	19951106
	WO 9614408	A3	19960829		
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 791058	A1	19970827	EP 1995-938418	19951106
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 10508478	T2	19980825	JP 1995-515058	19951106
	US 6395959	B1	20020528	US 1996-643732	19960506
	US 5948678	A	19990907	US 1998-119024	19980720
	US 2003182670	A1	20030925	US 2002-152994	20020523

L9 ANSWER 16 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:428575 CAPLUS
DN 125:107019
TI Nucleotide sequence encoding yeast enzyme **I-SceI** and its use in inducing homologous recombination in eukaryotic cells and protein production in transgenic animals
SO PCT Int. Appl., 122 pp.
CODEN: PIXXD2
IN Choulika, Andre; Perrin, Arnaud; **Dujon, Bernard**; Nicolas, Jean-Francois
AB Synthetic DNA encoding the enzyme **I-SceI** is provided. The DNA sequence can be incorporated in cloning and expression vectors, transformed cell lines and transgenic animals. The vectors are useful in gene mapping and site-directed insertion of genes. A synthetic gene encoding Saccharomyces cerevisiae **I-SceI** restriction endonuclease was expressed in Escherichia coli and yeast. The enzyme was used in genetic mapping of a yeast chromosome, of YAC's, and of cosmids. **I-SceI** efficiently induced double-stranded breaks in a chromosomal target in mammalian cells and the breaks were repaired using a donor mol. that shares homol. with the regions flanking the break.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9614408	A2	19960517	WO 1995-EP4351	19951106
WO 9614408	A3	19960829		
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5792632	A	19980811	US 1994-336241	19941107
EP 791058	A1	19970827	EP 1995-938418	19951106
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 10508478	T2	19980825	JP 1995-515058	19951106

=> d an ti so au ab pi l5 8 5 2

L5 ANSWER 8 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:428575 CAPLUS
DN 125:107019
TI Nucleotide sequence encoding yeast enzyme I-SceI and its use in inducing homologous recombination in eukaryotic cells and protein production in transgenic animals
SO PCT Int. Appl., 122 pp.
CODEN: PIXXD2
IN Choulika, Andre; Perrin, Arnaud; Dujon, Bernard; Nicolas, Jean-Francois
AB Synthetic DNA encoding the enzyme **I-SceI** is provided. The DNA sequence can be incorporated in cloning and expression vectors, transformed cell lines and transgenic animals. The vectors are useful in gene mapping and site-directed insertion of genes. A synthetic gene encoding Saccharomyces cerevisiae **I-SceI** restriction endonuclease was expressed in Escherichia coli and yeast. The enzyme was used in genetic mapping of a yeast **chromosome**, of YAC's, and of cosmids. **I-SceI** efficiently induced double-stranded breaks in a chromosomal target in **mammalian** cells and the breaks were repaired using a donor mol. that shares homol. with the regions flanking the break.

STN: SEARCH HISTORY

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9614408	A2	19960517	WO 1995-EP4351	19951106
	WO 9614408	A3	19960829		
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5792632	A	19980811	US 1994-336241	19941107
	EP 791058	A1	19970827	EP 1995-938418	19951106
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 10508478	T2	19980825	JP 1995-515058	19951106

L5 ANSWER 5 OF 23 MEDLINE on STN
AN 95198715 MEDLINE
TI Induction of homologous recombination in **mammalian chromosomes** by using the **I-SceI** system of Saccharomyces cerevisiae.
SO Molecular and cellular biology, (1995 Apr) 15 (4) 1968-73.
Journal code: 8109087. ISSN: 0270-7306.
AU Choulika A; Perrin A; Dujon B; Nicolas J F
AB The mitochondrial intron-encoded endonuclease I-SceI of Saccharomyces cerevisiae has an 18-bp recognition sequence and, therefore, has a very low probability of cutting DNA, even within large genomes. We demonstrate that double-strand breaks can be initiated by the I-SceI endonuclease at a predetermined location in the mouse genome and that the breaks can be repaired with a donor molecule homologous regions flanking the breaks. This induced homologous recombination is approximately 2 orders of magnitude more frequent than spontaneous homologous recombination and at least 10 times more frequent than random integration near an active promoter. As a consequence of induced homologous recombination, a heterologous novel sequence can be inserted at the site of the break. This recombination can occur at a variety of chromosomal targets in differentiated and multipotential cells. These results demonstrate homologous recombination involving chromosomal DNA by the double-strand break repair mechanism in mammals and show the usefulness of very rare cutter endonucleases, such as I-SceI, for designing genome rearrangements.

L5 ANSWER 2 OF 23 MEDLINE on STN
AN 95187954 MEDLINE
TI The yeast I-Sce I meganuclease induces site-directed chromosomal recombination in mammalian cells.
SO Comptes rendus de l'Academie des sciences. Serie III, Sciences de la vie, (1994 Nov) 317 (11) 1013-9.
Journal code: 8503078. ISSN: 0764-4469.
AU Choulika A; Perrin A; Dujon B; Nicolas J F
AB Double-strand breaks in genomic DNA stimulate recombination. Until now it was not possible to induce in vivo site-directed double-strand breaks in a **mammalian** chromosomal target. In this article we describe the use of **I-Sce** I meganuclease, a very rare cutter yeast endonuclease, to induce site-directed double-strand breaks mediated recombination. The results demonstrate the potential of the **I-Sce** I system for **chromosome** manipulation in **mammalian** cells.

=>

STN: SEARCH HISTORY